

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Please cancel claims 5 and 29, without prejudice.

1. (Previously Presented) A method for producing beer comprising:
 - (a) filtering beer through a porous membrane until such time that the porous membrane is in need of cleaning,
 - (b) contacting the porous membrane with an enzyme selected from the group consisting of cellulases, amylases, and combinations thereof in the absence of any other enzymes to clean the porous membrane, and
 - (c) then reusing the porous membrane to continue filtering beer.
2. (Canceled)
3. (Previously Presented) The method of claim 1, wherein the porous membrane is contacted with the cellulase and no other enzyme.
4. (Currently Amended) A method for producing beer comprising:
 - (a) filtering beer through a porous membrane until such time that said porous membrane is in need of cleaning,
 - (b) contacting the porous membrane with a cellulase, in absence of any other enzymes, the cellulase having a crystalline:soluble cellulase activity ratio at 60 minutes of at least about 0.1 to clean the porous membrane, and
 - (c) then reusing the porous membrane to continue filtering beer.
5. (Canceled)
6. (Canceled)
7. (Previously Presented) The method of claim 4, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 0.3.
8. (Previously Presented) The method of claim 7, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 0.4.

9. (Previously Presented) The method of claim 8, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 0.5.

10. (Previously Presented) The method of claim 9, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 1.

11. (Previously Presented) The method of claim 10, wherein the cellulase has a crystalline:soluble cellulose activity ratio at 60 minutes of at least about 1.2.

12. (Previously Presented) The method of claim 4, wherein the cellulase is derived from *Trichoderma*.

13. (Previously Presented) The method of claim 12, wherein the *Trichoderma* is *Trichoderma reesei* or *Trichoderma longibrachiatum*.

14. (Previously Presented) The method of claim 4, wherein the cellulase is derived from *Thermomonospora*.

15. (Previously Presented) The method of claim 14, wherein the *Thermomonospora* is *Thermomonospora fusca*.

16. (Currently Amended) The method of claim [[4]] 1, wherein the porous membrane is contacted with an amylase.

17. (Previously Presented) The method of claim 16, wherein the amylase is selected from the group consisting of α -amylase, β -amylase, and the combination thereof.

18. (Previously Presented) The method of claim 4, wherein the method further comprises contacting the porous membrane with an aqueous base prior to reusing the porous membrane.

19. (Canceled)

20. (Previously Presented) The method of claim 18, wherein the aqueous base is an aqueous solution of NaOH and/or KOH.

21. (Previously Presented) The method of claim 18, wherein the base is present in a concentration of 0.1-1 N in the aqueous base.

22. (Previously Presented) The method of claim 18, wherein the porous membrane is contacted with the aqueous base at a temperature of 40-90 °C.

23. (Canceled)

24. (Currently Amended) The method of claim [[4]] 1, wherein the porous membrane is contacted with α -amylase at a temperature of 60-75 °C and a pH of 4.6-5.8.

25. (Currently Amended) The method of claim [[4]] 1, wherein the porous membrane is contacted with β -amylase at a temperature of 40-60 °C and a pH of 4.6-5.8.

26. (Previously Presented) The method of claim 4, wherein the porous membrane is cleaned until the zeta potential of the porous membrane ceases to change.

27. (Previously Presented) The method of claim 4, wherein the time that the porous membrane is in need of cleaning is determined by the pressure drop across the porous membrane.

28. (Previously Presented) The method of claim 4, wherein the method further comprises determining the time that the porous membrane is in need of cleaning by determining the streaming potential or zeta potential of the porous membrane.

29. (Canceled)

30. (Previously Presented) The method of claim 28, wherein the filtration is halted when the streaming potential or zeta potential of the porous membrane is reduced to 20% of its original value for the unused porous membrane.

31. (Previously Presented) The method of claim 4, wherein the porous membrane is a polyamide porous membrane.

32. (Previously Presented) The method of claim 31, wherein the filtration is halted when the zeta potential of the porous membrane exceeds -5 mV as measured at pH 4.2.

33. (Previously Presented) The method of claim 4, wherein the filtering of the beer is cold-filtering of the beer.

34. (Canceled)

35. (Canceled)

36. (Currently Amended) The method of claim ~~[[29]]~~ 1, wherein ~~cleaning~~contacting the porous membrane with an enzyme comprises contacting the porous membrane with a cellulase having a crystalline:soluble cellulase activity ratio at 60 minutes of at least about 0.1 to clean the porous membrane.

37. (Previously Presented) The method of claim 4, wherein the porous membrane is a nylon-6,6 membrane.

38. (Previously Presented) The method of claim 4, wherein the porous membrane has a pore rating of about 0.02-1 μm .

39. (Previously Presented) The method of claim 38, wherein the porous membrane has a pore rating of about 0.1-1 μm

40. (Previously Presented) The method of claim 39 wherein the porous membrane has a pore rating of about 0.45 μm .

41. (Previously Presented) The method of claim 4, wherein the method further comprises pre-filtering the beer before filtering the beer through the porous membrane.

42. (Previously Presented) The method of claim 41, wherein the beer is pre-filtered through Diatomaceous earth or a combination of Diatomaceous earth and deep-bed filtration.